

WHAT IS CLAIMED IS:

1. An optical conduction unit comprising an optical conduction body and a reflector;

wherein said optical conduction body includes a
5 light incidence surface for receiving light from a light source, a light outgoing surface extending in the prescribed x direction to cause the light that propagated from said light incidence surface inside the optical conduction body to go out to the outside, and a pair of
10 side surfaces joined to the light outgoing surface and extending in the x direction;

wherein said reflector includes a first member and a second member for sandwiching said optical conduction body in the y direction perpendicular to the x direction
15 and for covering said pair of side surfaces; and

wherein said first member comprises first fitting means for mating with a portion of said optical conduction body in the y direction, second fitting means for mating with another portion of said optical
20 conduction body in the x direction, third fitting means for mating with a portion of said second member in the y direction, and fourth fitting means for mating with another portion of said second member in the x direction.

25 2. The optical conduction unit according to claim 1,

wherein said optical conduction body comprises a main region having said light outgoing surface and said

pair of side surfaces and an auxiliary region joined in the x direction to the main region; and

wherein said auxiliary region includes a said light incidence surface and a light reflecting surface for reflecting the light that propagated from said light incidence surface inside the auxiliary region toward said main region and is configured so that the light that propagated from said auxiliary region inside said main region goes out to the outside from said light outgoing surface, while propagating in the x direction.

3. The optical conduction unit according to claim 2,

wherein said first member comprises a body section adjacent to said optical conduction body and extending in the x direction and a first wall section and a second wall section protruding in the y direction from the body section and facing each other via a gap; and

wherein said first fitting means comprises said first and second wall sections and has said auxiliary region inserted between the first and second wall sections.

4. The optical conduction unit according to claim 3, wherein said first wall section covers said light reflecting surface.

5. The optical conduction unit according to claim 3, wherein said main region comprises an end surface facing in the x direction and said first member comprises a third wall section for covering said end surface.

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6. The optical conduction unit according to claim 5, wherein a first protrusion or orifice having a central axis thereof extending in the x direction is provided in said end surface, and

10 wherein the said second fitting means is an orifice or a protrusion provided in said third wall section so as to mate with said first protrusion or orifice.

7. The optical conduction unit according to claim 6,

15 wherein at one end portion of said second member in the x direction, a second protrusion or orifice having a central axis thereof extending in the y direction is provided, and at the other end portion of said second member in the x direction, a third protrusion or orifice
20 having a central axis thereof extending in the x direction is provided;

wherein said third means is an orifice or a protrusion provided in said first member so as to mate with said second protrusion or orifice; and

25 wherein said fourth fitting member is an orifice or protrusion provided in the third wall section of said

first member so as to mate with said third protrusion or orifice.

8. The optical conduction unit according to claim 7,
5 wherein said third wall section can deform elastically in the x direction.

9. The optical conduction unit according to claim 1,
wherein said reflector has a tubular portion surrounding
10 from all four sides the region facing said light incidence surface.

10. The optical conduction unit according to claim 1,
wherein said first and second members are made from a
15 white resin.

11. An image reading device comprising a light source,
an optical conduction unit for illuminating light emitted
from the light source toward a reading line of a document,
20 a plurality of sensor IC chips for receiving the light reflected from said reading line and outputting an image signal, and a case accommodating the light source, the optical conduction unit, and the plurality of sensor IC chips;

25 wherein said optical conduction unit comprises an optical conduction body and a reflector;

wherein said optical conduction body includes a light incidence surface for receiving light from a light source, a light outgoing surface extending in the prescribed x direction to cause the light that propagated
5 from said light incidence surface inside the optical conduction body to go out to the outside, and a pair of side surfaces joined to the light outgoing surface and extending in the x direction;

wherein said reflector includes a first member and a
10 second member for sandwiching said optical conduction body in the y direction perpendicular to the x direction and for covering said pair of side surfaces; and

wherein said first member comprises first fitting means for mating with a portion of said optical
15 conduction body in the y direction, second fitting means for mating with another portion of said optical conduction body in the x direction, third fitting means for mating with a portion of said second member in the y direction, and fourth fitting means for mating with
20 another portion of said second member in the x direction.